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LOCKWARD, HOWARD J. (Manchester (Conn.) Memorial Hospital), **LUNDBERG, G. A. F., Jr.**, and **ODOROFF, M. E.**: *Effect of intensive care on mortality rate of patients with myocardial infarcts.* *Public Health Reports, Vol. 78, August 1963, pp. 655-661.*

A study at Manchester (Conn.) Memorial Hospital measured effects of an intensive care unit and of anticoagulant therapy on mortality rates of patients with unequivocal diagnoses of myocardial infarction who survived the first 48 hours after admission.

The mortality rates of 72 patients hospitalized under conventional care were compared with those of 82 patients hospitalized under intensive care. In the conventional care group 52 patients received anticoagulant drugs; in the intensive care group, 65.

When the effects of sex, age, "good" or "poor" risk, and use of anticoagulant therapy were controlled and data

weighted to achieve equal proportions of patients in each group, 15 percent fewer deaths occurred in the intensive care group, a difference significant at the 2 percent level. The finding suggests the need for further studies of the effect of intensive care on other diagnoses.

The data also showed that use of anticoagulants reduced the mortality rate by 28 percent when the effects of sex, age, risk, and type of hospital care were controlled. The evidence supports the value of anticoagulant therapy and suggests that this treatment combined with intensive care may be more effective than either treatment alone.

GEIGER, FRANK L. (South Carolina State Board of Health), and **KUEMMERER, JANIE M.**: *Tuberculosis casefinding among contacts in seven South Carolina counties.* *Public Health Reports, Vol. 78, August 1963, pp. 663-668.*

Sixty-two new active cases of tuberculosis were found as the result of contact investigations of 146 index cases newly reported in 1961 in a 7-county area of South Carolina. Seventy-nine percent of the 40 index cases in white persons and 89 percent of the 106 in Negroes were in the advanced stage when reported.

In tuberculin tests of 357 contacts under 20 years of age, 113 persons were reactors, and 38 of these were found to have active disease. A total of 699 contacts were examined. The three active cases in white contacts stemmed from

index cases in persons whose sputum was positive by smear and culture. Of the 59 cases in Negro contacts, 41 were found in initial examinations and 18 in subsequent examinations. All but four were in contacts to index patients whose sputum was positive by smear and culture.

The active tuberculosis case rate per 1,000 Negro contacts examined was 116. Negro children (0-4 years) showed the greatest risk among contacts of developing tuberculosis, with an age-specific rate of 131 per 100,000.

BELKIN, MARVIN (New York City Department of Health), **SUCHMAN, EDWARD A.**, **BERGMAN, MOE**, **ROSENBLATT, DANIEL**, and **JACOBZINER, HAROLD**: *Evaluation of hearing testing program in New York City elementary schools.* *Public Health Reports, Vol. 78, August 1963, pp. 681-688.*

A study of the hearing testing program in New York City elementary schools was undertaken in 1961 to evaluate the effectiveness with which children with impaired hearing are being identified and the procedures by which these children are followed up for further diagnosis.

A representative sample of 53 elementary schools was selected, and the school health records of 51,415 pupils were examined. Of these pupils, approximately one-half had received hearing tests during the school year. Ninety-five percent of those tested were found to have normal hearing. Analysis of the 5 percent identified by school tests as having a

hearing impairment showed that only 56 percent of this group had received a clinical examination and that only 32 percent of those who had received a clinical examination were found to have impaired hearing.

Three percent of a subsample of pupils studied over a 5-year period from kindergarten through fourth grade had never received an elementary school hearing test.

Research personnel conducted independent hearing tests with 7,129 children. Comparison of the results of research tests with school tests indicated agreement for 93 percent of the children.

CONTENTS *continued*

	<i>Page</i>
Methods for mass rearing of <i>Aedes aegypti</i> (L.)	711
<i>Harvey B. Morlan, Richard O. Hayes, and Herbert F. Schoof</i>	
Local program for the mentally retarded	721
<i>Murray Grant</i>	
Use of complement fixation screening technique to identify poliovirus in enterovirus isolates	723
<i>Helen L. Casey and George E. Marchetti</i>	
New leptospiral serotype in the pyrogenes serogroup	727
<i>Earl E. Roth, W. V. Adams, Betty Greer, G. E. Sanford, Mary Moore, and Kay Newman</i>	
VDRL spinal fluid slide and tube and Kolmer tests. Comparison of reactivity	731
<i>Alcor S. Broune and Jean M. Broune</i>	
Environmental health training program, 1963-64.	733
Short reports and announcements:	
Science, technology, and development volumes	654
International mail pouch	661
Indian employees in the Division of Indian Health	668
PHS grants administrators	672
Trivalent oral polio vaccine	688
Publication announcements	698
Defense training for health personnel	705
Master's degree in radiological health	710
Occupational health notes	719
Program notes	720
The older American	726
FDA to increase information to medical professions	730
Child health and human development	732
The story of Medlars	734
Federal publications	735



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McCULLOCH, WILLIAM F. (Institute of Agricultural Medicine, State University of Iowa College of Medicine), **BRAUN, JOHN L., HEGGEN, DARROL W., and TOP, FRANKLIN H.:** *Studies on medical and veterinary students skin tested for toxoplasmosis. Public Health Reports, Vol. 78, August 1963, pp. 689-698.*

During 1960-61, 775 veterinary and medical students at universities in Iowa, Illinois, and Minnesota were skin tested for evidence of previous infection with *Toxoplasma gondii*. Students reporting a lifetime residence background of "more than 70 percent farm" had a significantly greater proportion of skin test positives than did students with "more than 70 percent city" background. No significant differences were found in the proportions of skin test positives among the freshman, sophomore, junior, and senior classes of veterinary students. Skin test pos-

itive status was significantly associated with moderate or marked contact with the following mammalian and avian species: swine, horses, sheep, cattle, cats, chickens, and turkeys. Other statistically significant items included marked soil contact, frequent work with farm animals, and a recollection of having had a pet dog in the home prior to age 6. Moderate or marked contact with dogs, wild rabbits, geese, and domestic ducks, as well as a history of animal bites, was not significantly associated with skin test positive status.

CASEY, HELEN L. (Public Health Service), and **MARCHETTI, GEORGE E.:** *Use of complement fixation screening technique to identify poliovirus in enterovirus isolates. Public Health Reports, Vol. 78, August 1963, pp. 723-726.*

At the beginning of the 1961 poliomyelitis season a screening procedure by complement fixation for identification of the three types of poliovirus was initiated by the Virology Section, Laboratory Branch of the Communicable Disease Center, to simplify typing of suspected enteroviruses. Neutralization tests must be held for 7 days before a final interpretation can be made, whereas complement fixation tests are read after overnight fixation of complement.

Isolates from 980 fecal and rectal swab specimens were used as complement-fixing antigens. Of these isolates, 726 (74 percent) were identified as type 1, 2, or 3 poliovirus by the complement fixation screen. Twelve isolates (1.2 percent) were incorrectly identified by com-

plement fixation; five were subsequently found to be poliovirus and seven were identified as Coxsackie B₁ by neutralization tests.

The relatively good correlation shown between the complement fixation and the neutralization tests indicated that the complement fixation test is a useful tool in the initial screening of a large number of suspected enteroviruses. However, with the complement fixation procedure almost 20 percent of the isolates tested required additional tissue culture passage to obtain a definitive result, and a number of isolates remained anticomplementary. The complement fixation test, therefore, cannot be considered a substitute for the neutralization test.

The nature of a paper, not its importance or significance, determines whether a synopsis is printed. See "Information for Contributors" on last page of issue.

Environmental Health Training Program, 1963-64

Listed below are all short-term technical courses to be offered by the Public Health Service's Divisions of Occupational Health, Water Supply and Pollution Control, Air Pollution, Radiological Health, and Environmental Engineering and Food Protection from July 1, 1963 through June 30, 1964. Additional information and application forms are available from the Director, Training Program, Robert A. Taft Sanitary Engineering Center, 4676 Columbia Parkway, Cincinnati 26, Ohio.

The facility or laboratory where each course is given is indicated by the following code:

DOH—Occupational Health Research and Training Facility, Cincinnati, Ohio.

SEC—Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio

Rock—Radiological Health Laboratory, Rockville, Md.
Mont—Southeastern Radiological Health Laboratory, Montgomery, Ala.

Vegas—Southwestern Radiological Health Laboratory, Las Vegas, Nev.

Win—Northeastern Radiological Health Laboratory, Winchester, Mass.

1963

July 8-19: Basic radiological health (211), Rock

July 16-26: Industrial hygiene engineering and ventilation (520), DOH, Los Angeles

Aug. 5-9: Orientation in occupational health (509), DOH, Olympia, Wash.

Aug. 5-16: Chemical analyses for water quality (100), SEC

Sept. 9-11: Sampling and identification of aero-allergens (405), SEC

Sept. 9-20: Basic radiological health (211), SEC

Sept. 9-20: Basic radiological health (211), Vegas

Sept. 10-12: Milk pasteurization controls and tests (302), SEC

Sept. 16-27: Water quality studies (161), SEC

Sept. 23-27: Medical management of radiation accidents (204), Vegas

Sept. 23-Oct. 11: Environmental radiation surveillance (224), SEC

Sept. 30-Oct. 11: Basic radiological health (211), Rock

Sept. 30-Oct. 11: Recent developments in water microbiology (120), SEC

Oct. 7-11: Elements of air quality management (422), SEC

Oct. 14-18: Control of gaseous emissions (415), SEC

Oct. 14-18: Medical X-ray protection (213), Rock

Oct. 14-18: Microbiological examination of milk and milk products (305), SEC

Oct. 14-25: Industrial hygiene engineering (501), DOH

Oct. 14-25: Industrial hygiene chemistry (502), DOH

Oct. 21-25: Control of particulate emissions (413), SEC

Oct. 21-Nov. 1: Basic radiological health (211), New York City

Oct. 28-Nov. 8: Plankton identification and control (141), SEC

Oct. 28-Nov. 8: Radioactive pollutants in the environment (205), SEC

Nov. 4-8: Orientation in occupational health (509), DOH, Milwaukee

Nov. 11-22: Analysis of radionuclides in water (206), SEC

Nov. 18-21: Diffusion of air pollution—theory and application (423), SEC

Nov. 18-22: Chemical analysis of milk and milk products (304), SEC

Nov. 18-22: Radiation control in public health programs (209), Rock

Dec. 2-6: Institutional sanitary food service (330), SEC

Dec. 2-13: Industrial hygiene engineering (501), DOH

Dec. 2-13: Basic radiological health (211), SEC

Dec. 2-13: Basic radiological health (211), Rock (for pharmacists only)

Dec. 2-13: Bio-oxidation of industrial wastes (162), SEC

Dec. 16-20: Measurement of airborne radioactivity (417), SEC

1964

Jan. 6-10: Medical and biological aspects of air pollution (407), SEC

Jan. 6-17: Basic radiological health (211), SEC

Jan. 6-17: Chemical analyses for water quality (100), SEC

Jan. 20-31: Microscopic analysis of atmospheric particulates (410), SEC

Jan. 20-31: Occupational radiation protection (212), SEC

Jan. 20-31: Industrial hygiene engineering (501), DOH, San Juan, P.R.

Jan. 27-Feb. 7: Basic radiological health (211), Rock

Feb. 3-7: Orientation in occupational health (509), DOH, San Juan, P.R.

Feb. 3-7: Food microbiology (310), SEC

Feb. 3-14: Radioactive pollutants in the environment (205), SEC

Feb. 10-14: Pesticide residue analysis of foods (311), SEC

Feb. 10-14: Medical X-ray protection (213), Rock

Feb. 17-28: Analysis of radionuclides in foods (207), SEC

- Feb. 17-28: Basic radiological health (211), Vegas
 Feb. 17-28: Recent developments in water microbiology (120), SEC
 Mar. 2-6: Analysis of atmospheric inorganics (409), SEC
 Mar. 2-13: Industrial hygiene engineering (501), DOH
 Mar. 2-13: Water quality management (160), SEC
 Mar. 9-13: Methods and practices for State milk laboratory survey officers (303), SEC
 Mar. 9-18: Reactor safety and hazards evaluation (223), SEC
 Mar. 9-20: Analysis of atmospheric organics (408), SEC
 Mar. 16-20: Dust evaluation techniques (512), DOH
 Mar. 23-27: Radionuclide analysis by gamma spectroscopy (208), SEC
 Mar. 30-Apr. 10: Basic radiological health (211), SEC
 Apr. 6-10: Radiological health for nurses (203), Rock
 Apr. 6-10: Current concepts in occupational medicine (518), DOH
 Apr. 13-24: Basic radiological health (211), Rock
 Apr. 13-24: Occupational radiation protection (212), SEC
 Apr. 20-May 1: Organic industrial wastes characterization (101), SEC
 Apr. 27-May 1: Medical X-ray protection (213), Rock
 Apr. 27-May 1: Elements of air quality management (422), SEC
 Apr. 27-May 8: Radioactive pollutants in the environment (205), SEC
 May 4-8: Meteorological aspects of air pollution (411), SEC
 May 4-8: Inorganic industrial wastes characterization (102), SEC
 May 11-22: Toxicologic investigative techniques (517), DOH
 May 11-22: Atmospheric survey (401), SEC
 May 11-22: Analysis of radionuclides in water (206), SEC
 May 25-29: Source sampling for atmospheric pollutants (402), SEC
 June 1-12: Basic radiological health (211), Win
 June 1-12: Advanced training for sanitary engineer reserve officers, SEC (course one and course two—titles to be announced)
 June 15-26: Aquatic biology for engineers (140), SEC

The Story of Medlars

To cope with the rapid rise in volume of medical literature, the National Library of Medicine is installing an automated system for preparing indexes and bibliographies, known as MEDLARS (Medical Literature Analysis and Retrieval System). The system, expected to be fully operational early in 1964, will use a high-speed digital computer to process, store, and retrieve information. Mechanized equipment will compose and print out text according to signals on magnetic tape, obtained through the computer.

With MEDLARS, the library expects to:

- Improve and enlarge the *Index Medicus* and at the same time reduce the time required to prepare the monthly edition for printing from 22 to 5 working days.
- Increase the number of journal articles indexed from about 145,000 in 1963 to some 250,000 in 1969.
- Add monographs and proceedings to the source

materials indexed, beginning with some 5,000 English-language monographs in 1964 and covering some 13,000 English and foreign publications by 1969.

- Increase the average depth of indexing per article by a factor of five. Although all of these descriptors will be in the computer system, only about a third will appear in the *Index Medicus*.

- Expand the list of regularly published special bibliographies, such as the "Bibliograph of Medical Reviews."

- Fill, in 1 or 2 days, requests for special bibliographies, expected to number 2,500 in 1964 and 22,500 in 1969.

How the new system was developed, what it will do, how it works, design details, and management considerations are described in "The Medlars Story at the National Library of Medicine." A limited number of copies are available from the library, Bethesda, Md.



Narcotic Drug Addiction. *PHS Publication No. 1021 (Mental Health Monograph No. 2); 1963; 22 pages; 25 cents.*

To provide an overall picture of addiction to narcotic drugs in the United States, this monograph describes its prevalence, its victims, its treatment and efforts toward its cure, and its legal implications. The need for a medical approach in coping with problems of the addict, his family, and his community is stressed. Present methods of treatment, new findings, and hopes for the future are enumerated for professional persons, teachers, and lay people.

Design Features Affecting Asepsis in the Hospital. *PHS Publication No. 930-D-9; 20 pages; 25 cents.* Considers hospital design in terms of helping to prevent the development and spread of infection. Discusses problem areas in detail and makes suggestions for design features that facilitate good aseptic practice.

Planning the Laboratory for the General Hospital. *PHS Publication No. 930-D-10; 1963; 9 pages.* Topics include the need for laboratory facilities in the general hospital, essentials of planning, plans for three sizes of laboratories, statistical information on laboratory use, and detailed architectural and equipment needs for various areas and services of the laboratory. (Revised and reprinted from *Architectural Record*, February 1961, and prepared in collaboration with College of American Pathologists.)

Nursing Homes and Related Facilities: Fact book. *PHS Publication No. 930-F-4; February 1963; 177 pages; 70 cents.* Contains highlight data on number and characteristics of existing facilities and statistics and other background information on nursing home patients, national

consumer expenditures for care, State licensure programs, construction programs, noninstitutionalized services available to the chronically ill and aged, and personnel training programs. Also includes selected population and socioeconomic data.

Public Health Service Grants and Awards. Research grants. *PHS Publication No. 964, part I; 1963; 536 pages; \$1.50.*

All PHS research grants awarded in fiscal year 1962 are listed by State or country, city, and institution, with names of principal investigators, project titles, grant numbers, study sections responsible for review, and amounts. A summary table gives numbers and totals awarded by the separate institutes and divisions. Other tabulations show numbers and amounts of grants in each institution and in each State or country, by supporting institute or division.

Public Health Service Grants and Awards. Construction of cancer research facilities, health research facilities, and hospital and medical facilities. *PHS Publication No. 964, part III; 1963; 56 pages; 25 cents.*

Construction grants awarded from fiscal year 1962 funds are listed by State, city, and institution with names of responsible officials, purposes, and amounts.

The Indian Health Program of the U.S. Public Health Service. *PHS Publication No. 1026; May 1963; 27 pages.*

The story is told of how the Public Health Service provides comprehensive health services to about 380,000 American Indians and Alaska natives through an integrated system of hospitals and clinics, public health, and environmental health programs. A summarized history of Federal health services to Indians with information on the effects that

geographic and cultural isolation have on the people's health is included.

Charts and tables show the progress which has been made in improving the health status during the 8 years the Public Health Service has had responsibility for the Indian health program.

The National Heart Institute's Training Programs. *PHS Publication No. 1002. 1963; 4 pages; 10 cents.* Describes briefly purpose and procedures of three types: undergraduate and graduate grants, fellowships, and research career awards.

Safe Milk Through Industry, States, U.S. Public Health Service Cooperative Effort. *PHS Publication No. 1011; 1963; leaflet; 5 cents, \$2.50 per 100.* Explains operation of the Cooperative State-Public Health Service Program for the Certification of Interstate Milk Shippers. Lists advantages to milk exporting and importing States and shows the results which have been achieved in the past 10 years.

Glaucoma and Its Effect on Eyesight. *PHS Publication No. 1030; 1963; leaflet; 5 cents.* Explains in simple terms what glaucoma is and how it can cause gradual loss of sight without warning. Points out what population groups are particularly susceptible and why periodic testing for glaucoma is important even for those who have no evidence of eye disease. Emphasizes the need for early detection and treatment.

This section carries announcements of new publications prepared by the Public Health Service and of selected publications prepared with Federal support.

Unless otherwise indicated, publications for which prices are quoted are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Orders should be accompanied by cash, check, or money order and should fully identify the publication. Public Health Service publications which do not carry price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Public Health Service, Washington, D.C., 20201.

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Footnotes should be worked into the text or offered as supplemental items.

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Most Public Health Monographs are placed on sale by the Superintendent of Documents; series subscriptions are not available. Monographs are not included in subscriptions to *Public Health Reports*.

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